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SAFETY PRECAUTIONS

SERVICE WARNING

Only qualified service technicians who are familiar with safety checks and guidelines should perform service work. Before replacing parts, disconnect power source to protect electrostatically sensitive parts. Do not attempt to modify any circuit unless so recommended by the manufacturer. When servicing the receiver, use an isolation transformer between the line cord and power receptacle.

SERVICING THE HIGH VOLTAGE AND CRT

Use EXTREME CAUTION when servicing the high voltage circuits. To discharge static high voltage, connect a 10K ohms resistor in series with a test lead between the receiver ground and CRT anode lead. DO NOT lift the CRT by the neck. Always wear shatterproof goggles when handling the CRT to protect eyes in case of implosion.

X-RAY RADIATION AND HIGH VOLTAGE LIMITS

Be aware of the instructions and procedures covering X-ray radiation. In solid-state receivers and monitors, the CRT is the only potential source of X-rays. Keep an accurate high voltage meter available at all times. Check meter calibration periodically. Whenever servicing a receiver, check the high voltage at various brightness levels to be sure it is regulating properly. Keep high voltage at rated value, NO HIGHER. Excessive high voltage may cause X-ray radiation or failure of associated components. DO NOT depend on protection circuits to keep voltage at rated value. When troubleshooting a receiver with excessive high voltage, avoid close contact with the CRT. DO NOT operate the receiver longer than necessary. To locate the cause of excessive high voltage, use a variable AC transformer to regulate voltage. In present receivers, many electrical and mechanical components have safety related characteristics which are not detectable by visual inspection. Such components are identified by a # on both the schematic and the parts list. For SAFETY, use only equivalent replacement parts when replacing these components.

GENERAL GUIDELINES

Perform a final SAFETY CHECK before returning receiver to customer. Check repaired area for poorly soldered connections, and check entire circuit board for solder splashes. Check board wiring for pinched wires or wires contacting any high wattage resistors. Check that all control knobs, shields, covers, grounds, and mounting hardware have been replaced. Be sure to replace all insulators and restore proper lead dress.

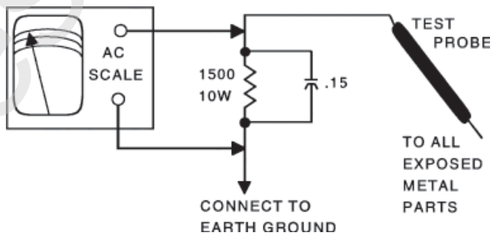
SAFETY CHECKS — FIRE AND SHOCK HAZARD

Cold Leakage Checks for Receivers with Isolated Ground

Unplug the AC cord, connect a jumper across the plug prongs, and turn the power switch on (if applicable). Use an ohmmeter to measure the resistance between the jumped AC plug and any exposed metal cabinet parts such as antenna screw heads, control shafts, or handle brackets. Exposed metal parts with a return path should measure between 1M ohms and 5.2M ohms. Parts without a return path must measure infinity.

Hot Leakage Current Check

Plug the AC cord directly into an AC outlet. DO NOT use an isolation transformer. Use a 1500 ohms, 10W resistor in parallel with a .15µF capacitor to connect between any exposed metal parts on the receiver and a good earth ground. (See figure below.) Use an AC voltmeter with at least 5000 ohms per volt sensitivity to measure the voltage across the resistor. Check all exposed metal parts and measure voltage at each point. Voltage measurements should not exceed .75VAC, 500µA. Any value exceeding this limit constitutes a potential shock hazard and must be corrected. If the AC plug is not polarized, reverse the AC plug and repeat exposed metal part voltage measurement at each point.



The listing of any available replacement part herein in no case constitutes a recommendation, warranty, or guarantee by SAMS Technical Publishing, LLC as to the quality and suitability of such replacement part. The numbers of the listed parts have been compiled from information furnished to SAMS Technical Publishing, LLC by the manufacturers of the specific type of replacement part listed.

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5303

SET 5303

MODEL 27V412T (CHASSIS M134C)

RCA

5303

PHOTOFACT® *Technical Service Data*

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For a Complete List of Manuals, Visit www.samswebsite.com

RCA

Model 27V412T (Chassis M134C)

Representative Model

Essential coverage for servicing a television receiver...

- **Schematics**
- **Component locations**
- **Parts list**

Coverage includes these additional models and chassis:

Models	Chassis
24V412T	M134C
27V412TYX1	M134C
27V412TYX3	M134C
27V412TYX5	M134C
27V412TYX8	M134C

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OCTOBER 2007 SET 5303

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MISCELLANEOUS ADJUSTMENTS

HIGH VOLTAGE TEST

High voltage must not be higher than 31.8kV at any beam current.

X RAY PROTECTION TEST

Tune the set to receive a crosshatch signal. Apply an external power supply to the positive lead of C249 (observe polarity). Slowly increase the voltage from the supply. The set must shut down and remain off when the voltage reaches 30V.

B+

Tune the set to receive a crosshatch signal, set the preset picture mode to normal, and adjust VR802 for 130V ±0.5V at the positive lead of C422.

RF AGC

The RF AGC is factory preset at the time of manufacture for optimum operation over a wide range of RF signal input conditions and should not need readjustment, unless there is cable TV adjacent channel interference or picture bending or channel 6 color beats because of excessive RF signal input, this can occur if the receiver is located too close to the transmitting tower. The signal should be attenuated at the antenna to reduce the signal to a satisfactory level.

NOTE: Adjusting the RF AGC to extreme limits of its parameters unusually provides a poor signal to noise ratio.

SCREEN

Tune the set to receive a crosshatch signal, set the preset picture mode to normal and set all of the picture controls (brightness, contrast, etc) to midrange. Enter the service mode and preset the menu 1 values. Set RC, GC, and BC to 80, GD and BD to 40. While still in the service mode, press the input button on the remote and the vertical will collapse. Adjust the screen control to produce a dim horizontal line on the CRT.

COLOR TEMPERATURE

Test point	Display	
Adjust:	Menu 1 RC	Red Cutoff
	Menu 1 GC	Green Cutoff
	Menu 1 BC	Blue Cutoff
	Menu 1 GD	Green Drive
	Menu 1 BD	Blue Drive

Set color picture temperature to normal and set all of the picture controls (brightness, contrast, etc) to midrange. Tune the set to receive a gray scale stairstep test pattern. Enter the service mode and adjust the values for cutoff and drive controls to obtain proper color tracking, no tinting of black and white and shades of gray, and color temperature is 9300 degrees - X = 284, Y = 299.

SUB BRIGHTNESS

Tune the set to receive a gray scale stairstep signal from the A/V inputs. Set picture color temperature to normal, Set all of the picture controls (brightness, contrast, etc) to midrange. Enter the service mode and select menu 5. Adjust the value of BRTC sub brightness to just light the second dark bar, making sure the first bar stays black.

Test point	Display	
Adjust:	Menu 3 HPOS6	H Position
	Menu 3 PARA6	H Parabola
	Menu 3 TRAP6	H Trapazoid
	Menu 3 HSIZE6	H Size
	Menu 3 CNRT6	H Corner Top
	Menu 3 CNRB6	H Corner Bottom
	Menu 2 HIGHT6	Height
	Menu 2 VLIN6	Linearity
	Menu 2 VP60	Vertical Center
	Menu 2 VSC6	Vert S Correct

NOTE: Confirm correct convergence and purity before adjusting geometry.

Tune the set to receive a circular test pattern to make visual geometry adjustments. Enter the service mode. Adjust menu 2 and menu 3 values for the least amount of geometric distortion approximately 7% overscan.

SERVICE MODE

NOTE: Pressing the 1 and input buttons on the remote will shut the set down if you are in the service mode.

To enter the service mode, press and hold the volume down button on the set while pressing the info/del button on the remote. Menus 1 thru 10 can be accessed directly using the remote keypad number buttons. For menu 11 press the 1 and notepad buttons on the remote; menu 12 press the 1 and caps buttons on the remote; menu 13 press 1 and info/del buttons on the remote; menu 14 press 1 and sleep buttons on the remote; menu 15 press 1 and calendar buttons on the remote; 16 press 1 and insert buttons on the remote; menu 17 press 1 and FAV buttons on the remote; menu 18 press 1 and go back buttons on the remote. If any of the service mode menu items have been adjusted, press the sound button to save the settings, and exit the service mode.

SERVICE MODE CHART

ITEM	SETTING
Menu 1	
FAC01	
RC	76
GC	86
BC	7B
GD	33
BD	2E
Menu 2	
FAC02	
HIGHT6	19
VP60	07
VLIN6	0A
VSC6	0A
VBLK6	0A
VCEN6	2B
Menu 3	
FAC03	
HPOS6	13
PARA6	1C
TRAP6	22
HSIZE6	1F
CNRT6	0A
CNRB6	09
VEHT6	03
HEHT6	03
Menu 4	
FAC04	
CNTX	7F
CNTN	08
BRTX	20
BRTN	20
COLX	35
COLN	00
TNTX	30
TNTN	30
Menu 5	
FAC05	
BRTC	3C
COLC	23
COLP	00
SCOL	07
SCNT	06
CNTC	4C
TNTCT	37
TNTCV	37

ITEM	SETTING
Menu 6	
FAC06	
ST3	20
SV3	20
SV4	19
SVD	19
ASSH	07
SHPX	10
SHPN	2A
Menu 7	
FAC07	
MOD1	60
MOD2	B0
MOD3	70
OPT	36
OPTM1	C1
OPTM2	00
HDCNT	00
HSTOP	FF
Menu 8	
FAC08	
RFAGC	26
BRTS	00
OSD	21
OSDF	53
CCD OSD	4A
CCD OSDF	65
TXCX	1F
RGCN	16
Menu 9	
FAC09	
V01	46
V25	5A
V50	65
V100	7F
VOLMAX	32
CURTCEN	A5
GATE	2A
VOL-OUT	73
Menu 10	
FAC10	
MODE4	22
MODE5	0B
MODE6	1E
MODE7	C4
MODE8	2D
MODE8	C2

ITEM	SETTING
Menu 11	
FAC11	
MPB STR	43
MPB HMC	0D
MPB HP	07
MPB LP	11
MPB LIM	00
SUB FRE	28
SUB HP	02
VOL MAI	00
Menu 12	
FAC12	
SVM	05
SVM1	05
OSD2	20
OSDF2	64
PYNX	28
PYNN	18
PYXS	22
PYNS	10
Menu 13	
FAC13	
CLTM	4F
CLVO	48
CLVS	4F
ABL	27
DCBS	12
FLGO	82
FLG1	0D
Menu 14	
FAC14	
HAFC	09
AGCC	1C
NOIS	01
ONTM	08
NSHP	1A
PVLVL	80
PLMT	80

ITEM	SETTING
Menu 15	
FAC15	
RC-C	FC
GC-C	02
BC-C	00
GD-C	FD
BD-C	0A
Menu 16	
FAC16	
RC-W	04
GC-W	01
BC-W	02
GD-W	FB
BD-W	E7
YUVGC	F7
YUVBC	08
Menu 17	
FAC17	
D-COL	32
D-BRI	32
D-CON	5A
D-SHP	32
Menu 18	
FAC18	
S-COL	32
S-BRI	32
S-CON	4B
S-SHP	32

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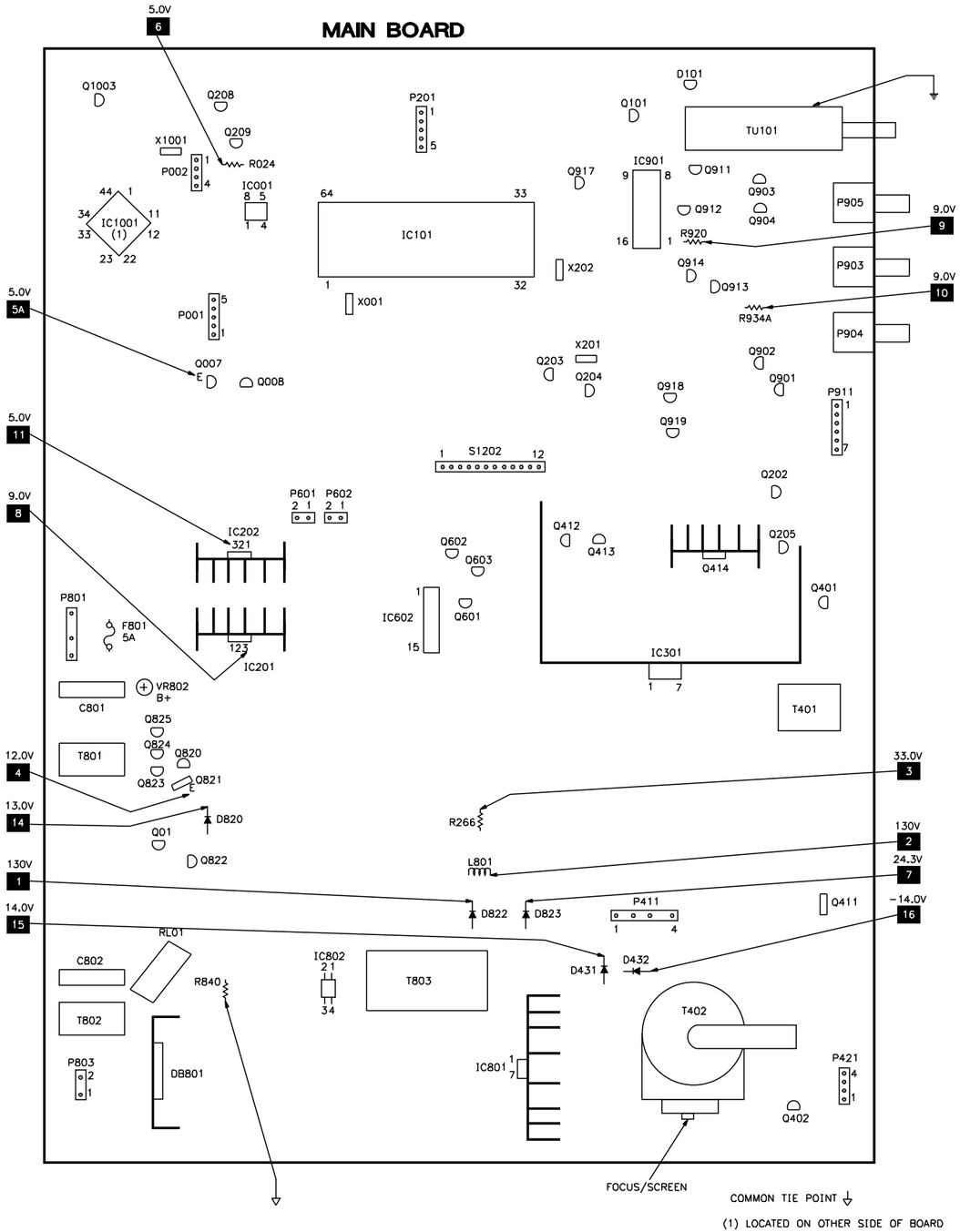
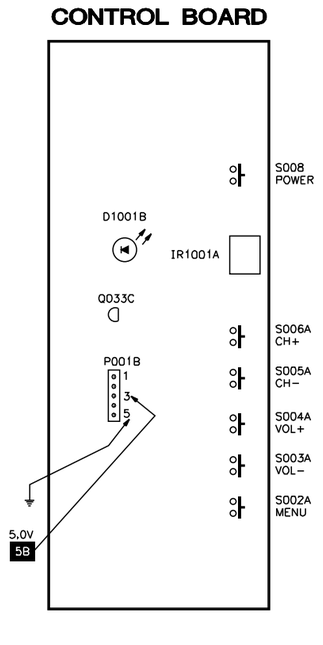
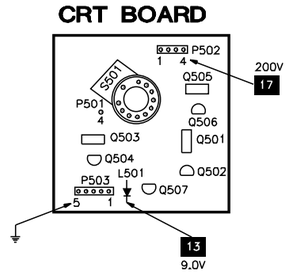
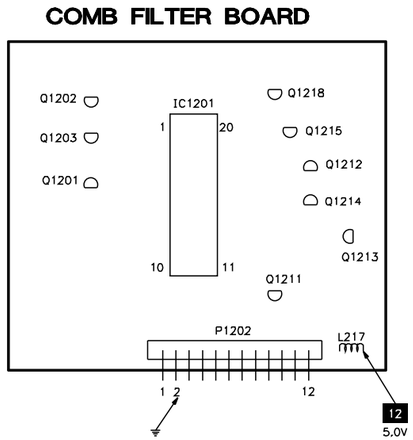
PLACEMENT CHART









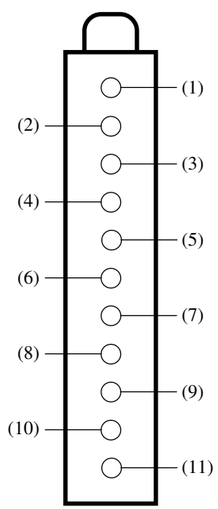
TUNER INFORMATION

TUNER VOLTAGE CHART

Pin	Voltage
(1) AGC	1.8V
(2) VT	0V
(3) GND	0V
(4) SCL	4.0V
(5) SDA	4.4V
(6) VCC	4.8V
(7) VCC	4.8V
(8) NC	0V
(9) 33V	33.0V
(10) NC	0V
(11) IF1	0V

NOTE: Voltages do not change on different bands.

TUNER TERMINAL GUIDE



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SCHEMATIC COMPONENT LOCATION GUIDE

C008	E26	C231	E2	C415	E4	C826	A21	C1016	B41	D101	A23	D823B	C21	L502	B32	Q501	A30	R023A	C25	R230	E2	R417	E4	R814	C19	R931	D35	R1219	E38
C01	B17	C233	C6	C419	D10	C827	A22	C1017	D42	D202	B16	D824	B23	L503	B32	Q502	A30	R024	C23	R231	E2	R418	E3	R815	C19	R932	B33	R1220	C39
C021	C24	C234	C6	C422	A23	C828	A21	C1018	E42	D203	C16	D826	E19	L505	C31	Q503	C30	R024A	C25	R232	B6	R419	D10	R816	D20	R932A	D33	R1221	C39
C022	C24	C235	C14	C431	E22	C829	B19	C1019	E43	D204	B16	D827	C17	L506	C31	Q504	C30	R025	A27	R233	B7	R420	E4	R820	D21	R933	D33	R1228	B39
C025	B24	C236	D3	C432	E24	C830	C21	C1023	B44	D205	C14	D828	C17	L801	A22	Q505	B30	R025A	C25	R233A	B6	R420A	E4	R821	A21	R934	B34	R1229	B39
C026	C23	C237	D3	C433	E21	C831	C22	C1024	C44	D206	E2	D829	C18	L1001	E43	Q506	B30	R026	B27	R234	B7	R422	D11	R823	C21	R934A	D23	R1232	E39
C027	C26	C238	B9	C435	E21	C832	C22	C1025	B42	D207	C12	D834	B22	L1201	B36	Q507	C29	R026A	C25	R235	B8	R431	E22	R825	D22	R935	D34	R1233	C40
C028	B23	C239	B10	C441	E22	C833	B23	C1031	C43	D208	E14	D1001A	D28	L1211	D37	Q601	D45	R027A	D25	R238	D3	R432	E14	R826	B22	R936	D34	R1234	C40
C029	B24	C241	B10	C442	E23	C834	E18	C1033	C44	D209	E14	DB801	A19	L1212	C37	Q602	D45	R030	B23	R239	C14	R433	E21	R827	B22	R937	D34	R1236	B37
C030	D26	C242	B9	C443	E15	C835	B17	C1034	C44	D210	E15	DEGAUSS	A19	L1213	D37	Q603	E46	R031	D25	R241	D3	R453	E13	R828	E19	R944	C44	R1237	B37
C031	C26	C243	B10	C451	E13	C836	C18	C1035	B42	D211	C11	F801	A17	L1214	D37	Q820	B22	R032	D25	R242	B10	R460	E23	R829	B22	R945	C27	RL01	A18
C032	C26	C244	D1	C501	A30	C840	B20	C1036	B42	D212	C11	IC001	B27	L1215	B38	Q821	B22	R033	D25	R243	B10	R461	A32	R830	C18	R946	B33	RL01	B18
C033	B26	C245	D1	C502	C30	C902	C33	C1037	A43	D213	C11	IC101	A26	L1216	C37	Q822	B17	R033B	E28	R244	D1	R501	A29	R831	B17	R946A	B34	RT801	A18
C034	B26	C246	D4	C503	B30	C903	B34	C1038	A43	D214	C13	IC101	B11	L1217	D23	Q823	E19	R033C	D27	R245	D5	R502	A29	R832	E18	R947	B35	RT802	A20
C041	B26	C247	D1	C504	E23	C904	C42	C1201	B36	D215	D16	IC101	B5	P800	A17	Q824	E18	R0333	C25	R246	D1	R503	A30	R833	C17	R948	B35	S002A	C25
C043	B26	C248	D1	C505	C31	C905	C42	C1202	B36	D262	E15	IC101	D1	P901	B33	Q825	E18	R034	D26	R247	D5	R505	C29	R834	C17	R951	D41	S003A	C25
C070A	B25	C249	E15	C506	C24	C908	A34	C1203	B36	D301	D7	IC201	C23	P901	C41	Q901	C42	R036	C26	R248	B10	R506	C30	R834A	C17	R952	D41	S004A	C25
C101	C4	C250	C12	C508	C31	C909	D41	C1204	B36	D303	E3	IC202	D23	P901	C41	Q902	C42	R036A	C26	R250	E16	R508	C30	R834B	C17	R953	C42	S005A	D25
C104	A23	C251	C11	C509	C24	C910	D41	C1205	D24	D304	E2	IC301	D6	P902	B33	Q903	D42	R043	C27	R251	E15	R509	C29	R835	C17	R954	C42	S006A	D25
C105	B1	C254	A7	C624	B46	C911	D24	C1206	D24	D309	D9	IC602	A47	P903	A33	Q904	D42	R044	B26	R253	E15	R510	B29	R836	E19	R1001	B42	S008	C25
C106	B1	C260	C22	C625	B46	C912	D24	C1211	D38	D310	D8	IC801	B19	P903	D41	Q911	D34	R070A	B25	R254	E2	R511	B30	R837	E18	R1002	B42	S501	A32
C107	B2	C261	C24	C626	A44	C913	B34	C1212	D38	D410	E4	IC802	B18	P903	D41	Q912	D34	R101	B1	R255	E2	R513	B30	R838	E17	R1004	D43	S501	B31
C108	C3	C262	C24	C627	A44	C914	B34	C1213	D39	D411	E10	IC901	A34	P904	A33	Q913	B44	R101A	C1	R256	E2	R514	D29	R840	B20	R1005	B42	S501	B31
C109	B3	C263	D23	C630	A44	C915	B44	C1214	D39	D412	E10	IC901	C36	P904	A9	Q914	B44	R102	C3	R257	E2	R515	C29	R901	C33	R1006	B41	S501	B31
C209	D16	C264	D24	C631	A44	C916	C44	C1215	B38	D420	E11	IC1001	A43	P904	A9	Q917	B35	R103	B3	R258	B8	R516	B30	R902	B34	R1007	B41	S501	B31
C210	D16	C266	A23	C634	D46	C924	D33	C1216	C38	D431	E22	IC1201	B38	P905	B45	Q918	C27	R104	B3	R261	E15	R517	C30	R903	B34	R1010	C44	S501	C31
C211	D15	C280	C14	C661	D45	C925	D33	C1217	C38	D432	E21	IR001A	A25	P905	B45	Q919	C44	R106	B2	R262	C12	R518	A30	R904	C41	R1011	C44	S501	C31
C211	D15	C281	C14	C801	A17	C926	D35	C1218	C38	D441	E22	J215	D3	P905	D35	Q1003	B41	R107	B2	R266	A22	R519	A31	R905	A34	R1022	B43	T401	E7
C212	D15	C301	E23	C802	A18	C927	B45	C1219	C38	D501	C29	J603	E10	Q007	B23	Q1201	B37	R108	B2	R302	D6	R520	C31	R906	C41	R1023	B43	T402	D12
C213	C10	C302	D7	C803	A19	C928	B45	C1220	B38	D502	C29	J604	E10	Q008	D25	Q1202	B37	R209	D16	R303	D6	R521	B31	R908	A33	R1201	B36	T402	D21
C214	C11	C303	E23	C804	A19	C929	D24	C1221	B38	D602	D45	J1005	E42	Q01	B17	Q1203	B37	R211	D15	R304	D8	R522	D29	R910	D41	R1202	B36	T801	A17
C216	C12	C304	D6	C804A	A19	C930	D24	C1222	D39	D810	C19	L001	D23	Q033C	D28	Q1211	C37	R212	D15	R309	D8	R605	D46	R911	D42	R1203	B36	T802	A18
C217	C11	C305	D8	C805	A19	C1001	E44	C1223	D39	D811	C19	L002	B25	Q101	B3	Q1212	E39	R213	D16	R310	D8	R605A	D46	R912	D41	R1204	B37	T803	A20
C218	C13	C306	E6	C805A	B18	C1002	E44	C1224	D38	D811A	C19	L101	B1	Q202	E16	Q1213	E39	R214	B16	R311	D6	R606	D45	R913	D42	R1205	B37	TU101	B2
C219	C12	C308	E22	C806	A20	C1004	A43	C1225	D38	D811B	C19	L102	B3	Q203	B6	Q1214	C39	R215	C15	R312	D6	R608	A44	R914	B10	R1206	B37	V801	B32
C220	C12	C309	D8	C807	A20	C1005	A43	C1229	D39	D812	C19	L204	C5	Q204	B7	Q1215	C39	R216	B15	R313	D7	R610	D46	R915	A10	R1207	B37	VR802	C17
C221	B4	C311	E3	C810	C19	C1006	E43	C1230	D39	D813	C18	L205	C12	Q205	E15	Q1218	B39	R219	C12	R316	E3	R611	B46	R916	C42	R1208	B37	W601	A48
C223	B5	C315	E2	C811	C19	C1008	E44	C1231	B39	D820	D21	L206	A8	Q208	D16	R001	D26	R220	C13	R401	E6	R612	A44	R917	C42	R1209	B38	W602	B48
C224	C6	C401	E8	C812	C19	C1009	E43	C1233	C39	D820A	D21	L208	C6	Q209	D15	R003	E27	R222	C4	R402	E7	R618	E46	R920	D23	R1211	C38	X001	C26
C225	C6	C402	E7	C813	C18	C1010	E43	C1234	C38	D820B	D21	L209	B7	Q401	E6	R004	A26	R223	C4	R404	E7	R656	D44	R923	D35	R1212	C38	X201	B7
C226	C5	C403	E7	C814	C19	C1011	E44	C1235	C38	D822	A21	L212	C11	Q402	E14	R005	E25	R225	A7	R412	E3	R801	A17	R924	B45	R1213	C39	X202	A7
C227	C5	C411	E9	C815	C20	C1012	B42	C1236	B38	D822A	A21	L301	D9	Q411	E8	R006	E26	R226	A7	R413	E4	R810	B19	R925	B45	R1215	E39	X1001	E44
C228	B5	C412	E9	C820	C21	C1013	B43	D001	D25	D822B	A21	L413	E10	Q412	E3	R01	B17	R227	C5	R414	E4	R811	B18	R926	B45	R1216	E39	Z101	B3
C229	B8	C413	E9	C821	D22	C1014	B42	D01	B17	D823	C21	L414	D10	Q413	E4	R02	B17	R228	D2	R415	E4	R812	C18	R929	C45	R1217	E38		
C230	D2	C414	E9	C822	D22	C1015	A43	D02	B17	D823A	C21	L501	C23	Q414	E4	R010	D27	R229	E2	R416	E4	R813	C20	R930	D34	R1218	E39		

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TELEVISION SCHEMATIC

TUNER NOT INCLUDED IN THIS COVERAGE

TU101 TUNER

RF IN 75

NC 2 VT 0V

L101

11 5.0V

C105 100µF

C106 .01

6 VCC 4.8V

7 VCC 4.8V

9 33V

3 33.0V

SEE IC101 PIN 57 PAGE 2G

R101 100

4 SCL 4.0V

SEE IC101 PIN 58 PAGE 2G

R101A 100

5 SDA 4.4V

0V 8 NC

0V 10 NC

IF1 0V 11

C107 .01

R107 56

R106 680

Q101 AMP

.03V

5.3V

0V

R108 150

R104 22

L102

R103 470

R102 150

8 9.0V

C108 .01

C109 .001

Z101 (Z141)

AGC 1.8V 1

RF AGC RANGE 1.8V TO 4.4V

C101 4.7µF

R222 100K

R223 100K

8 9.0V

NC NC

38 4.5V SIF OUT

31 1.8V SIF OUT

PART OF IC101 TV/MICROPROCESSOR

IF IN 0V 42

IF IN 0V 41

RF AGC 1.8V 43

IF AGC 1.7V 39

IF GND 40

PIF PLL 2.4V 35

DC NF 2.2V 34

SREG 2.1V 37

IF VCC (5V) 4.9V 36

IF VCC (9V) 9.0V 29

TV OUT 3.6V 30

C221 1µF

C226 .001

C227 .47µF

R227 270

C228 10µF

C223 4.7µF

L208

C233 100µF

C234 .01

8 9.0V

L204

11 5.0V

C224 100µF

C225 .01

R232 100 3.4V

R233A 3300

Q203 AMP 2.7V

8 9.0V

R233 330

R225 330

X202 4.5MHz FILTER

R226 100

C254 47pF

L206

SEE IC1001 PIN 2 PAGE 3C

R234 100

L209

X201 4.5MHz TRAP

Q204 AMP 2.7V 2.1V

8 9.0V

R235 120

R258 150

C229 47µF

SEE IC901 PIN 15 PAGE 3A

SYNC

PART OF IC101 TV/MICROPROCESSOR

HAFC 6.4V 14

HVCC 8.7V 17

EHT IN 2.2V 32

SIFIN 2.8V 33

FBP IN SCP-OUT 0V 12

EW OUT 3.5V 28

DVCC 3.3V 25

FSC OUT 1.1V 26

VSCAN 4.1V 15

TVGND 11

HOUT 0V 13

V OUT 4.2V 16

C244 .01

C245 330µF

R246 8200

C248 .47µF

C247 .0082 63V

R244 10

8 9.0V

C230 .1

R228 10K

R229 47K (24K)

C231 .0022

R231 33K

R230 24K

8 9.0V

R255 22K

D206

R257 4700

R256 5600

8 9.0V

R254 100K

A1

J215 (R314) 10K

D303

D304

C315 68pF

C311 .0027 100V

R316 10K

A2

C236 .01

C237 10µF

R241 270

8 9.0V

SEE Q1211 BASE PAGE 3B

C246 .47µF

R238 470

R418 6800

Q412 EW AMP 3.9V 2.7V 4.6V

R420A 2200

R420 2200 (8200)

Q414 AMP 2.7V 12.0V

R414 47K

R415 3.9 2W

C415 4.7µF

Q413 AMP 0V

R412 220 (2000)

8 9.0V

R416 4700

R417 2200

D410

R413 15K

8 9.0V

A3

R247 330

R245 100

R311 10K 1%

INPUT 3.3V 1

IC301 VERT OUTPUT

OUT -.28V 5

VREF 3.3V 7

GND 4

VCC 2

PUMP UP -12.4V 3

VP 14.8V 6

C304 .47 63V

R302 3900 1%

R303 36K (33K) 1%

3 33.0V

16 -14.0V

15 14.0V

C302 100µF

D301

15 14.0V

R312 18K 1%

C306 .0068

R313 1.5 2W

56.5V 5ms

R304 .68 1W

C305 .68 63V

16 -14.0V

D310

R310 10K

16 -14.0V

C309 .1 63V

R309 330 1W

62V 10µs

Q401 HORIZ AMP .38V 25.7V

R401 220

C402 .0033

R402 2400 1W

C403 390pF

T401

R404 4700 7W

C401 4.7µF 160V

2 130V

Q411 HORIZ OUTPUT 0V 130V

36.6V 10µs

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2H

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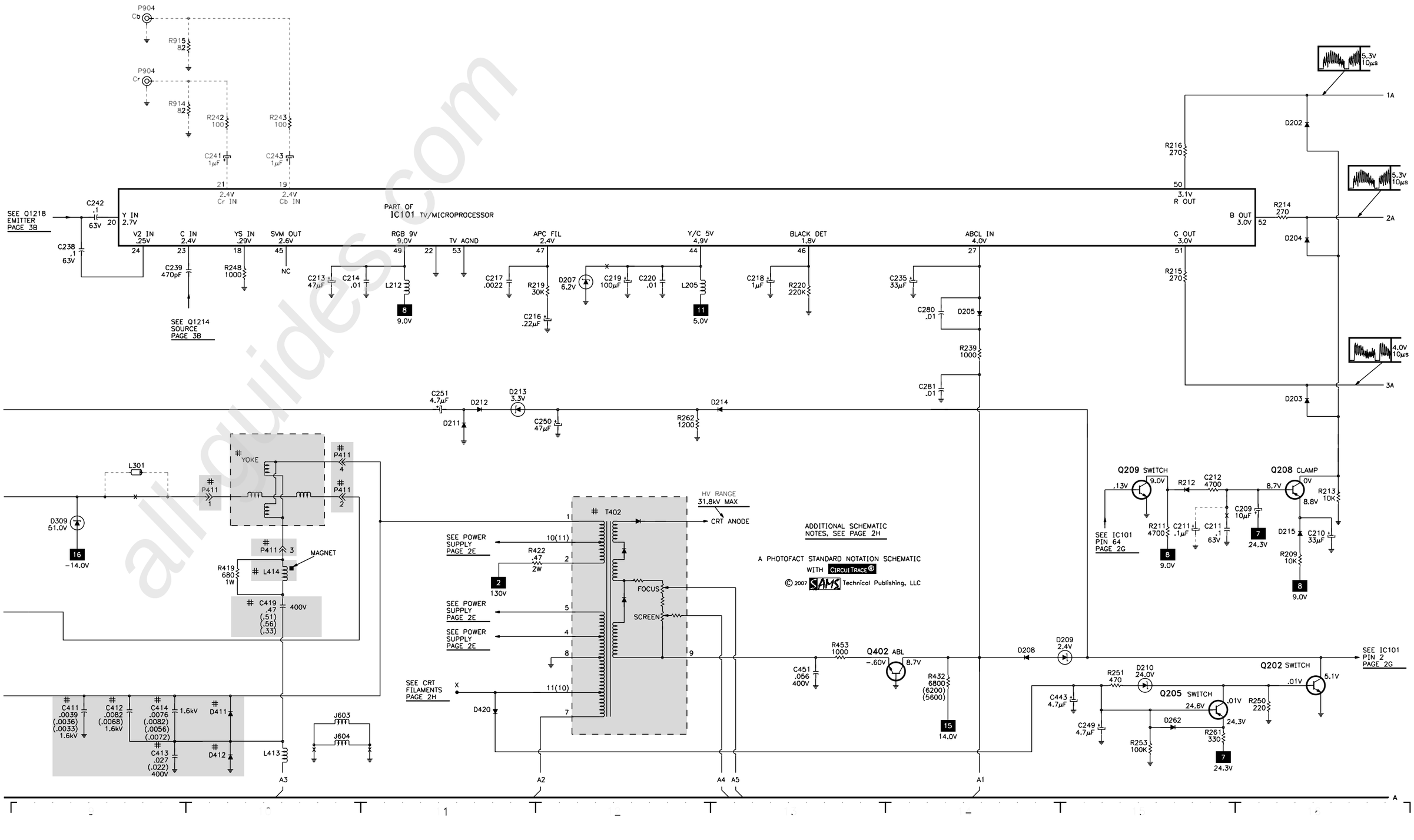

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POWER SUPPLY SCHEMATIC

E F

△ TAKEN FROM COMMON TIE POINT

P800 120VAC 1.2A POLARIZED · S801 · P801 · F801 5A · T801 · T802 · RL01 DEGAUSS · C804A (C804B) 470pF 400VAC · RT801 PTC · C801 .22 250VAC (275VAC) · R801 1M · C802 .22 250VAC (275VAC) · C803 .1 400V · C804 .0047 250VAC · C805 .0047 250VAC · DB801 · C805A (C805B) 470pF 400VAC · RT802 NTC · C806 680µF 200V · C807 .01 500V · C829 10µF · R840 8.2M 1W · C840 .0022 400VAC · R810 68K 2W

Q01 SWITCH · R01 4700 · R02 27K · D01 · D02 · C01 100µF · RL01 DEGAUSS

Q822 SWITCH · R831 33K · C835 .01 · R835 120K 1% · VR802 B+ 330 (2000) · R834 820K · R834A 6800 1% · R834B 390 1% · D828 6.2V · D827 · R833 10K

#IC802 OPTO COUPLER · R830 1000 · D813 6.2V · C836 470µF · D829 · R812 1000 · C813 .1 · C814 10µF · C811 3.3µF · D810 · R811 1000

IC801 POWER REG · C810 220pF · C812 .01 · R815 100 · D812 · R814 1500 · D811A · D811 · D811B · C815 .0015 2kV · R813 15 · R816 .12 2W

T803 · R821 3A · C826 470pF 2kV · D822A D822 D822B · C828 330µF 160V · C827 .01 500V · L801

R823 3A · C830 220pF 500V · D823A D823 D823B · C832 1000µF · C831 .01 · C260 .01

R820 5A · D820A · # D820 · D820B · C821 1000µF · C822 .01 · C820 220pF 500V · R825 2200

R826 10 2W · Q821 REG 130V · 1.4V · Q820 REG 9.3V · R827 4700 5W · D834 9.1V · R829 10K · R030 4.7 · Q007 REG 12.1V · 5.8V · D824 · SEE Q008 EMITTER PAGE 2G

R266 22K 2W · C266 .1 63V · D101 · C422 100µF (820µF) 160V · C104 .1 63V · C833 4700µF

P001 P001B · C028 10µF · C029 .01 · C025 10µF · R024 47 · C026 .01 · C021 10µF · C022 .01

L501 · C506 470µF · C509 .01

IC201 REG · P503 · P201 · C262 220µF · C261 .01

R920 100 · C930 100µF · C929 .01

R934A 1000 · R932A 1000 · C912 100µF · C911 .01

IC202 REG 9.0V · L001 · S1202 · C263 100µF · C264 .1

P1202 · L1217 · C1206 47µF · C1205 .1

PART OF # T402 · SEE T402 PAGE 2C

R431 1 2W · D431 · C431 220pF · C303 10µF · C301 220µF · C432 1000µF

R433 1 2W · C433 220pF 500V D432 · C435 1000µF · C308 220µF

D441 · C441 220pF 500V · C442 22µF 250V · R460 150K · P421 · P502 · C504 10µF 250V

Q825 SWITCH · Q824 SWITCH · Q823 SWITCH · C834 .01 · R838 10K · R836 1000 · R832 10K · R837 10K · D826 8.2V · R828 22K 2W

SEE IC101 PIN 64 PAGE 2G

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2H

1 130V SOURCE · 2 130V SOURCE · 3 33.0V SOURCE · 4 12.0V SOURCE · 5B 5.0V SOURCE · 5A 5.0V SOURCE · 6 5.0V SOURCE · 7 24.3V SOURCE · 13 9.0V SOURCE · 8 9.0V SOURCE · 9 9.0V SOURCE · 10 9.0V SOURCE · 11 5.0V SOURCE · 12 5.0V SOURCE · 14 13.0V SOURCE · 15 14.0V SOURCE · 16 −14.0V SOURCE · 17 200V SOURCE

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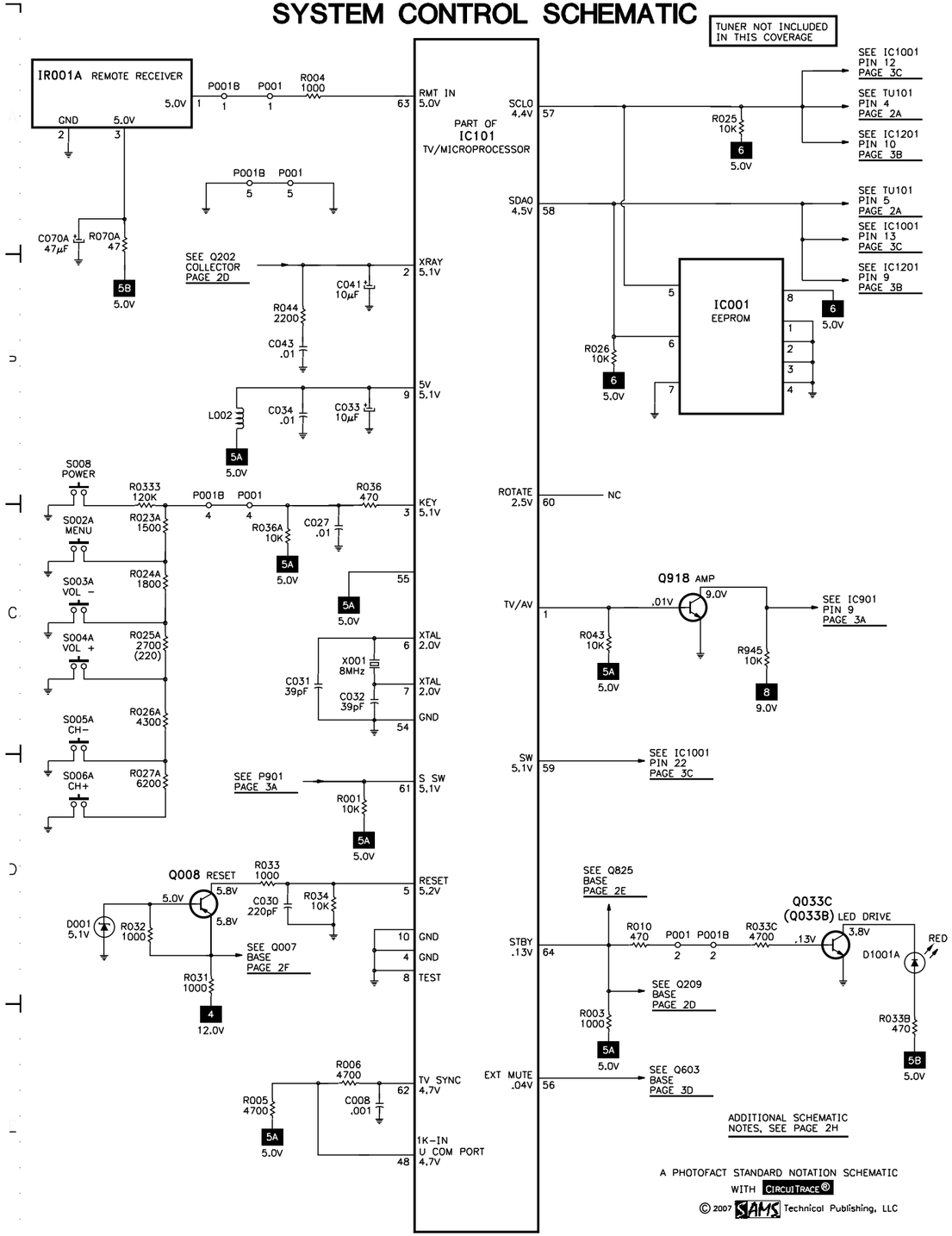
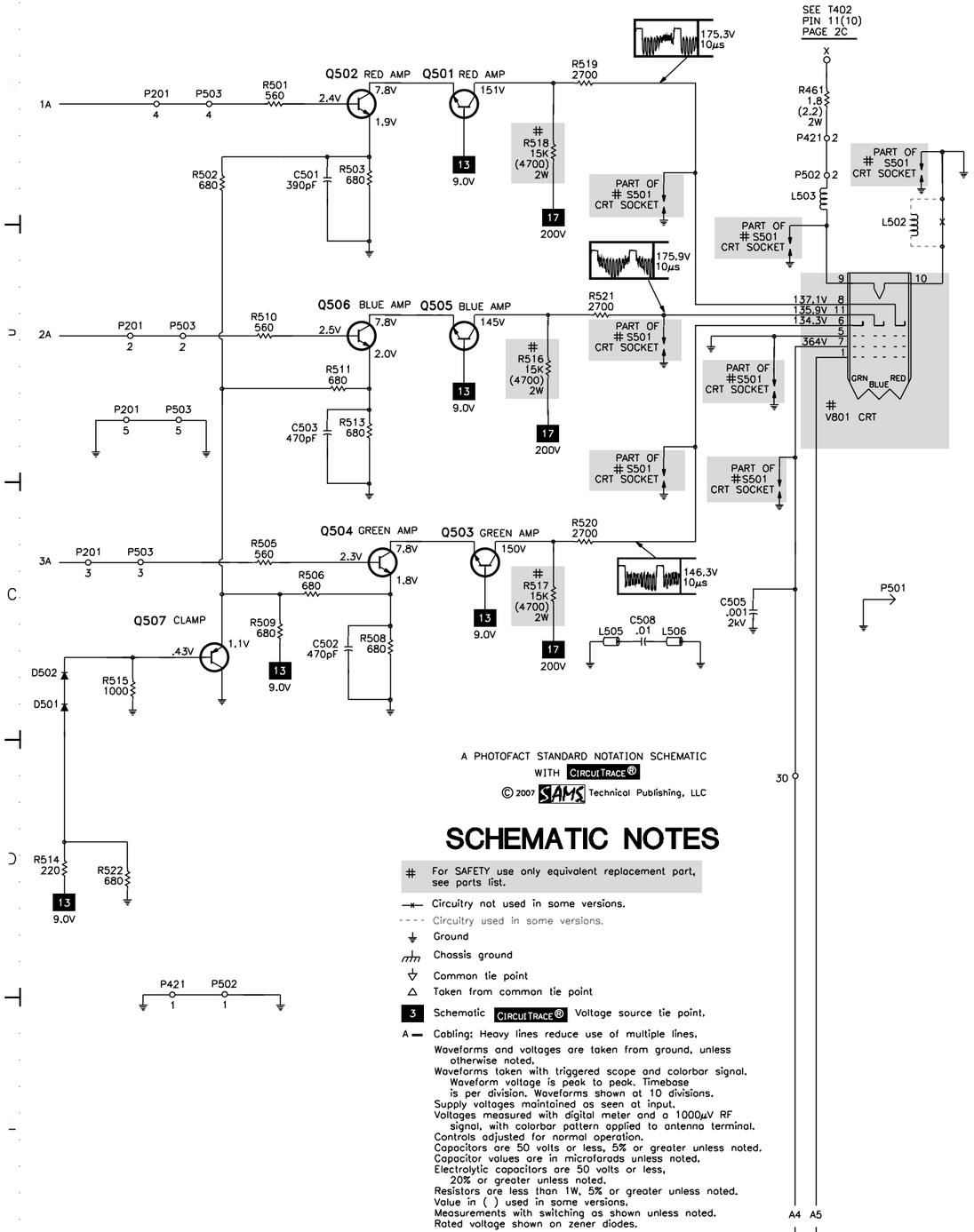
G
SYSTEM CONTROL SCHEMATIC



H
CRT SCHEMATIC



SCHEMATIC NOTES

For SAFETY use only equivalent replacement part, see parts list.

—×— Circuitry not used in some versions.

- - - - Circuitry used in some versions.

Ground

Chassis ground

Common tie point

Taken from common tie point

3 Schematic CIRCUITRACE® Voltage source tie point.

A — Cabling: Heavy lines reduce use of multiple lines.

Waveforms and voltages are taken from ground, unless otherwise noted.
Waveforms taken with triggered scope and colorbar signal. Waveform voltage is peak to peak. Timebase is per division. Waveforms shown at 10 divisions.
Supply voltages maintained as seen at input.
Voltages measured with digital meter and a 1000µV RF signal, with colorbar pattern applied to antenna terminal.
Controls adjusted for normal operation.
Capacitors are 50 volts or less, 5% or greater unless noted.
Capacitor values are in microfarads unless noted.
Electrolytic capacitors are 50 volts or less, 20% or greater unless noted.
Resistors are less than 1W, 5% or greater unless noted.
Value in ( ) used in some versions.
Measurements with switching as shown unless noted.
Rated voltage shown on zener diodes.

RCA MODEL 27V412T (CHASSIS M134C)

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VIDEO SWITCHING/COMB FILTER

PART OF P904 Y
PART OF P903 VIDEO IN 2
C908 47µF
R908 82
R905 22K
PART OF IC901 SWITCH
SEE Q204 EMITTER PAGE 2B
R946 1200
R946A 2200
P902 VIDEO IN
PART OF P901 S VIDEO
C903 47µF
SEE IC101 PIN 61 PAGE 2G
R902 82
R903 22K
R932 1000
C913 .01
C914 100µF
R934 1000
SEE Q918 COLLECTOR PAGE 2G
SEE Q919 COLLECTOR PAGE 3C
C902 .01
R901 82
S1202 P1202
R947 100K
R948 1000
Q917 AMP
Q1201 AMP
Q1202 AMP
Q1203 AMP
L1201
C1201 22pF
C1202 12pF
C1203 15pF
C1204 47µF
R1201 820
R1202 1200
R1203 6800
R1204 12K
R1205 560
R1206 560
R1207 560
R1208 1200
C1236 .47
C1215 .01
R1209 820
IC1201 COMB FILTER
AIN 2.4V
VRB 1.8V
YOUT 2.4V
COUT 1.6V
CKIN 2.5V
SDA 4.2V
SCL 4.0V
VDD3 4.9V
VDD3 0V
VDD4 4.9V
VDD2 4.9V
VDD1 4.9V
VSS1
FIL 1.6V
VRT 3.1V
DAVREFL 1.8V
DAVREFH 3.1V
BIAS 1.4V
SEE IC101 PIN 26 PAGE 2A
Q1211 AMP
R1237 100
R1236 10K
L1215
C1221 .0012
C1220 10pF
SEE IC101 PIN 58 PAGE 2G
SEE IC101 PIN 57 PAGE 2G
R1211 100
R1212 100
C1234 33pF
C1235 33pF
L1212
L1216
L1213
L1211
L1214
C1217 47µF
C1216 .1
C1219 47µF
C1218 .1
C1212 47µF
C1211 .1
C1224 47µF
C1225 .1
R1228 100
C1231 47pF
Q1218 Y AMP
R1229 1000
SEE IC101 PIN 20 PAGE 2C
R1220 100
Q1215 C AMP
R1221 1000
C1233 .001
R1234 22K
R1233 22K
R1213 820
C1222 180pF
C1223 .01
C1214 .01
C1230 .01
C1229 .01
C1213 .01
Q1214 AMP
SEE IC101 PIN 23 PAGE 2C
Q1213 AMP
R1217 22K
R1219 22K
R1232 4700
R1215 10K
Q1212 SWITCH
R1216 10K
R1218 10K
SEE IC1001 PIN 8 PAGE 3C
PART OF IC901 SWITCH
NC 5 0V
NC 4 0V
NC 2 0V
NC 1 0V
0V 3 NC
Q911 AMP
Q912 AMP
C924 10µF
C925 33pF
R933 15K
R935 22K
R936 1000
R937 10
R931 220
R930 220
R923 75
C926 220µF
PART OF P905 VIDEO OUT
P950 7
P911 7
P950 3
P911 3

ADDITIONAL SCHEMATIC NOTES, SEE PAGE 2H

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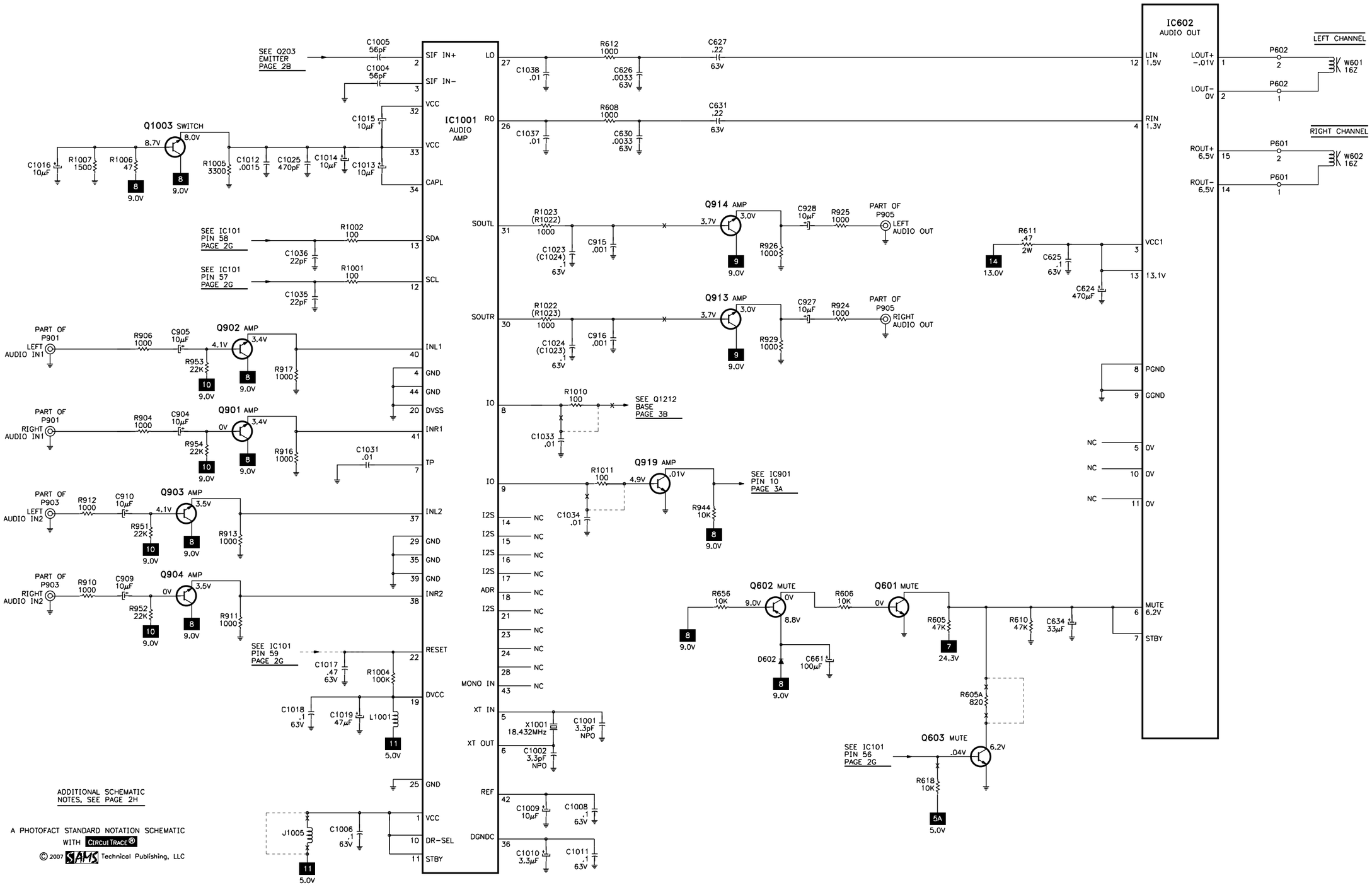

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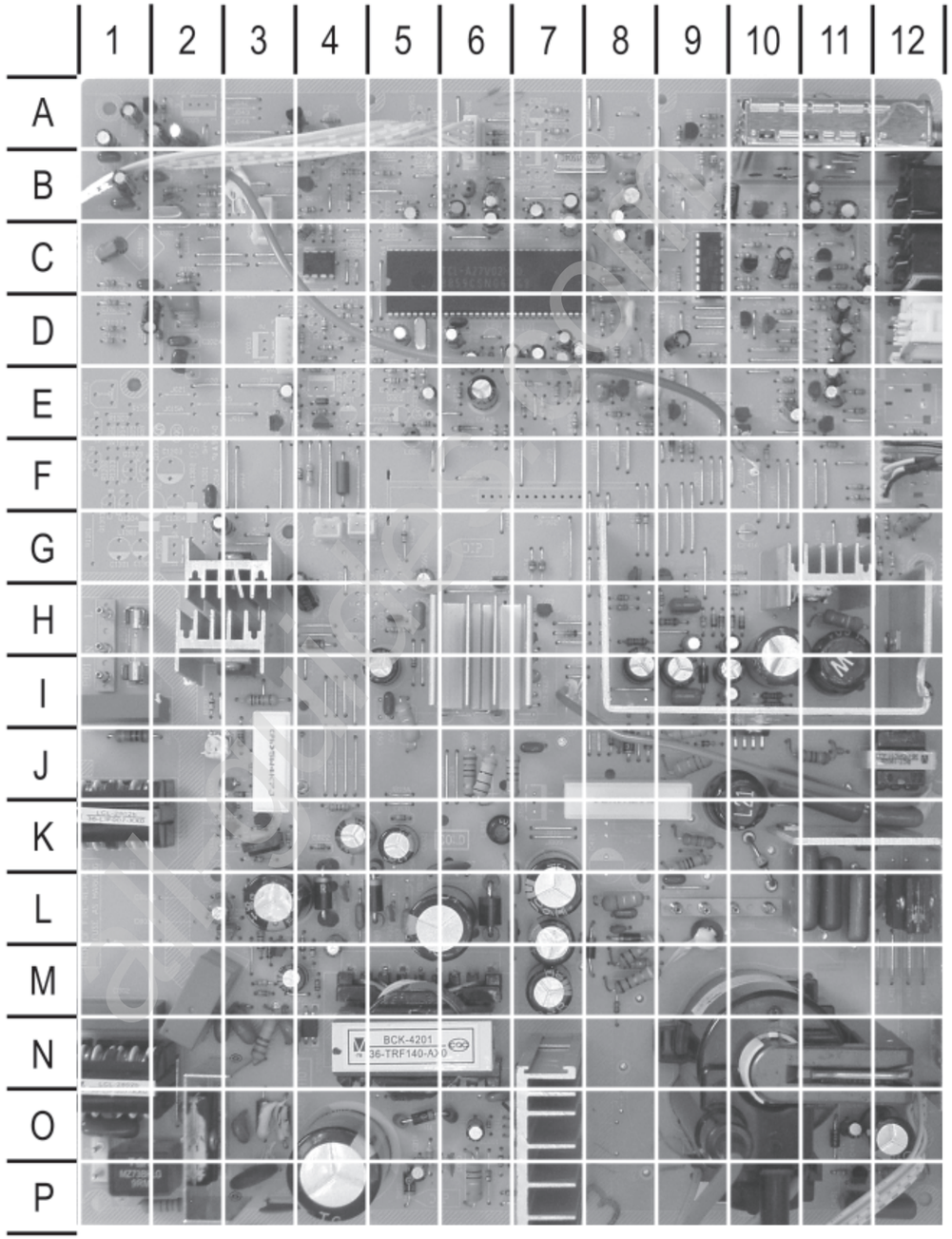

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C01	L2	C266	J7	C835	M3	D214	D9	P001	D3	R036A	D4	R404	K8	R914	E6
C021	C4	C280	E7	C836	M3	D215	A4	P201	A6	R043	D4	R412	H8	R915	E6
C022	C4	C281	E8	C840	N3	D262	H12	P411	L9	R044	D5	R413	H8	R916	F11
C025	B5	C301	I8	C902	F11	D301	I9	P421	O12	R101	A11	R414	H10	R917	D11
C026	B5	C302	I10	C903	D11	D303	J8	P601	G4	R101A	A11	R415	H11	R920	C10
C027	D4	C303	I10	C904	F11	D304	J7	P602	G4	R102	B9	R416	G11	R923	C10
C028	E3	C304	H9	C905	E11	D309	J8	P801	H1	R103	B9	R417	H9	R924	B11
C029	E4	C305	I9	C908	D11	D310	J9	P803	P1	R104	A9	R418	G8	R925	B11
C030	E5	C306	J9	C909	C11	D410	G11	P903	C12	R106	A9	R419	K9	R926	B10
C031	E5	C308	I9	C910	C11	D411	K10	P904	D12	R107	A9	R420	H9	R929	D10
C032	E5	C309	L9	C911	E10	D412	K11	P905	B12	R108	A9	R420A	H10	R930	C10
C033	E5	C311	L8	C912	E10	D420	O11	P911	F12	R209	A4	R422	L8	R931	C10
C034	E5	C315	J8	C913	D11	D431	M8	Q007	E3	R211	B4	R431	M8	R932	D11
C041	D5	C401	I12	C914	D11	D432	L8	Q008	E4	R212	A4	R432	M8	R932A	E10
C043	D4	C402	J10	C915	F10	D441	O12	Q01	L3	R213	A4	R433	M8	R933	B10
C101	A12	C403	I12	C916	F10	D602	G4	Q101	A9	R214	B6	R453	P11	R934	D10
C104	A10	C411	L11	C924	B10	D810	P5	Q202	G11	R215	B6	R460	N12	R934A	E10
C105	A11	C412	L11	C925	B10	D811	O5	Q203	E8	R216	B6	R461	P12	R935	B10
C106	A11	C413	K12	C926	B11	D811A	O5	Q204	E9	R219	B6	R605	H5	R936	C10
C107	A10	C414	L11	C927	B11	D811B	O6	Q205	G12	R220	B6	R605A	H7	R937	C10
C108	B9	C415	H10	C928	B11	D812	P6	Q208	A4	R222	A7	R606	H6	R944	D9
C109	B9	C419	J11	C929	C10	D813	P6	Q209	B4	R223	A7	R608	I5	R945	D9
C209	A3	C422	L7	C930	C10	D820	L4	Q401	H12	R225	D8	R610	H7	R946	D8
C210	A4	C431	M7	C1001	B2	D820A	K4	Q402	P12	R226	C8	R611	I5	R946A	C9
C211	A4	C432	M7	C1002	B2	D820B	L4	Q411	L12	R227	C8	R612	I7	R947	C8
C212	A4	C433	L8	C1004	B2	D822	L6	Q412	G8	R228	C8	R618	D4	R948	B8
C213	B6	C435	M7	C1005	B2	D822A	L6	Q413	G9	R229	D8	R656	G5	R951	D11
C214	B6	C441	O12	C1006	B2	D822B	L6	Q414	H11	R230	D8	R801	J1	R952	D11
C216	B6	C442	O12	C1008	B1	D823	L5	Q601	H7	R231	D8	R810	P2	R953	E11
C217	B6	C443	O11	C1009	B1	D823A	L5	Q602	G6	R232	D8	R811	P6	R954	E11
C218	B6	C451	P12	C1010	A1	D823B	L5	Q603	H7	R233	E8	R812	P6	R1001	C2
C219	B7	C624	I5	C1011	B1	D824	H4	Q820	K3	R233A	D8	R813	O5	R1002	D2
C220	B8	C625	I5	C1012	A1	D826	J3	Q821	K3	R234	E8	R814	O5	R1004	D1
C221	B7	C626	I7	C1013	A1	D828	M3	Q822	M3	R235	E9	R815	P6	R1005	A1
C223	C7	C627	I7	C1014	A2	D829	M4	Q823	K3	R238	E8	R816	P6	R1006	A2
C224	B8	C630	H5	C1015	C1	D834	K3	Q824	K3	R239	E7	R820	L4	R1007	A2
C225	B7	C631	H5	C1016	A2	DB801	O2	Q825	J3	R241	E7	R821	L7	R1010	C2
C226	C8	C634	H7	C1017	D2	F801	H1	Q901	E11	R242	E7	R823	L5	R1011	B2
C227	B8	C661	G5	C1018	C1	IC001	C4	Q902	E11	R243	E7	R825	K4	R1022	C1
C228	C8	C801	I1	C1019	D1	IC101	C5	Q903	C11	R244	E7	R826	J6	R1023	D1
C229	D9	C802	M1	C1023	D2	IC201	I3	Q904	C11	R245	D6	R827	J3	RL01	M1
C230	C8	C803	O1	C1024	D2	IC202	G3	Q911	B10	R246	D6	R828	J6	RT801	P1
C231	D8	C804	O2	C1025	A2	IC301	J10	Q912	C10	R247	E6	R829	K3	RT802	P3
C233	D8	C804A	N2	C1031	C2	IC602	H6	Q913	D10	R248	D7	R830	M4	S1202	F6
C234	D8	C805	O3	C1033	B2	IC801	O7	Q914	D10	R250	G12	R831	M3	T401	J12
C235	D7	C805A	N3	C1034	B2	IC802	N4	Q917	C8	R251	G12	R832	K3	T402	N10
C236	D7	C806	P4	C1035	C2	IC901	C9	Q918	E10	R253	G12	R833	M4	T801	K1
C237	D7	C807	P3	C1036	D2	IC1001*	C1	Q919	E10	R254	E8	R834	J3	T802	N1
C238	D8	C810	O6	C1037	D1	J215	G8	Q1003	A1	R255	E8	R834A	J3	T803	N5
C239	E7	C811	O6	C1038	D1	J603	H7	R001	E4	R256	F9	R834B	J3	TU101	A11
C241	D7	C812	P5	D001	E4	J604	G7	R003	B4	R257	F9	R835	I3	VR802	J2
C242	C8	C813	P6	D01	L3	J1005	B2	R004	E4	R258	D8	R836	L3	X001	D5
C243	D7	C814	P5	D02	L3	L001	F4	R005	B4	R261	G12	R837	K3	X201	E8
C244	D6	C815	O6	D101	A10	L002	E5	R006	B5	R262	H9	R838	I2	X202	D8
C245	E6	C820	L4	D202	B6	L101	B9	R01	L2	R266	J7	R840	N3	X1001	B2
C246	D6	C821	K4	D203	A6	L102	B9	R02	L3	R302	H9	R901	F11	Z101	B7
C247	D6	C822	K4	D204	A6	L204	B8	R010	D4	R303	H8	R902	E12		
C248	D6	C826	L7	D205	E7	L205	B8	R024	B4	R304	J9	R903	D10	* Located on other side of board.	
C249	G12	C827	K6	D206	F9	L206	C8	R025	C4	R309	K9	R904	E11		
C250	H9	C828	L6	D207	B7	L208	E8	R026	C4	R310	J9	R905	D10		
C251	H10	C829	M4	D208	E6	L209	E8	R030	F4	R311	I10	R906	E11		
C254	B8	C830	L5	D209	E6	L212	B6	R031	F4	R312	I10	R908	D11		
C261	G4	C831	K5	D210	G12	L413	I11	R032	E4	R313	J9	R910	C11		
C262	H4	C832	K5	D211	H10	L414	J10	R033	D5	R316	M8	R911	C11		
C263	G2	C833	L3	D212	H10	L801	K6	R034	E5	R401	H12	R912	C11		

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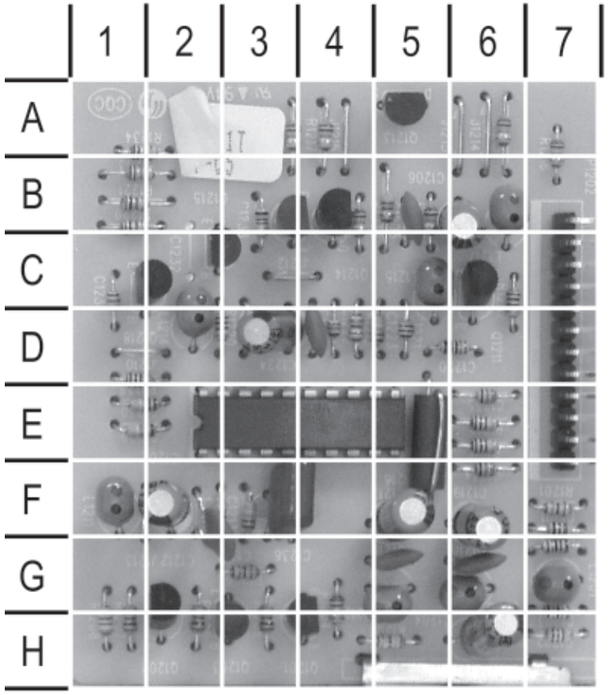

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C1203	H7	C1218	G6	C1233	B3	L1216	E5	Q1218	C2	R1212	E6	R1232	B5
C1204	H6	C1219	F6	C1234	F6	L1217	B6	R1201	F7	R1213	D4	R1233	B1
C1205	B5	C1220	D6	C1235	E6	P1202	F7	R1202	H7	R1215	A6	R1234	A1
C1206	B6	C1221	D5	C1236	F3	Q1201	H4	R1203	H5	R1216	A7	R1236	B5
C1211	F2	C1222	D4	IC1201	E2	Q1202	G2	R1204	G4	R1217	A4	R1237	C6
C1212	F2	C1223	D5	L1201	G7	Q1203	H3	R1205	H2	R1218	B4		
C1213	F3	C1224	D3	L1211	F1	Q1211	C6	R1206	H3	R1219	A3		
C1214	F3	C1225	D4	L1212	H5	Q1212	B3	R1207	H1	R1220	D3		
C1215	F4	C1229	E1	L1213	H6	Q1213	A5	R1208	H1	R1221	B1		

TEST EQUIPMENT

Test equipment listed by participating manufacturer illustrates typical or equivalent equipment used by Sams engineers to obtain measurements. This equipment is compatible with most types used by field service technicians.

Equipment	Sencore No.
Oscilloscope	SC3100
Generators	
RGB	CM2125
Multiburst Signal	VG91
Color Bar	VG91
TV Stereo	VG91
Digital VOM	SC3100
Frequency Meter	SC3100
Hi-Voltage Probe	HP200
Accessory Probes	TP212
Isolation Transformer	PR570
Capacitance Analyzer	LC102
CRT Analyzer	CR7000
AC Leakage Tester	PR570
Inductance Analyzer	LC102
Flyback Yoke Tester	TVA92
Field Strength Meter	SL753
Transistor Tester	TF46
Horizontal Analyzer	HA-2500
Video Analyzer	VG91, TVA92

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PARTS LIST

	Item No.	Type No.	Mfr. Part No.	Notes
	D001	5.1HSB	268334	-
	D01, 02	1N4148	266885	-
	D101 (1)	CW574CD	266892	-
	D101 (2)(3)(4)(5)	UPC574J	270921	-
	D202 Thru			
	D206	1N4148	266885	-
	D207	-	266890	-
	D208	1N4148	266885	-
	D209	-	268335	-
	D210	-	268336	-
	D211, 12	1N4148	266885	-
	D213	-	266888	-
	D214, 15	1N4148	266885	-
	D262	1N4148	266885	-
	D301	1N4001	266883	-
	D303	-	266891	-
	D304	FR104	266880	-
	D309	BZV85-C51	268337	-
	D310	1N4148	266885	-
	D410	1N4148	266885	-
#	**D411** (1)	BY228	266879	-
#	**D411** (2)(3)(4)(5)	-	271009	-
#	**D412**	FR104	266880	-
	D420 (4)(5)	1N4001	266883	-
	D420 (1)(2)(3)	FR104	266880	-
	D431, 32	FR104	266880	-
	D441	FR104	266880	-
	D501, 02	1N4148	266885	-
	D602	1N4148	266885	-
	D810, 11	FR104	266880	-
	D812	1N4148	266885	-
	D813	-	266890	-
#	**D820**	RU4YX	268338	-
	D822	RU4AM	268339	-
	D823 (1)(6)	RU4YX	268338	-
	D823 (2)(3)(4)(5)	SR3100	270876	-
	D824	1N4001	266883	-
	D826	-	266891	-
	D827	1N4148	266885	-
	D828	BZX79B6V2	270380	-
	D829	1N4148	266885	-
	D834	-	268340	-
	D1001A	-	268440	-

	Item No.	Type No.	Mfr. Part No.	Notes
	DB801	D3SB60	268341	-
	IC001	MC24-08P	266906	-
	IC101 (1)	TMPA8859CSNG	268344	-
	IC101 (2)(3)(4)(5)	TCL-A27V02-T0	270923	-
	IC201 (1)(6)	L7809CV	266912	-
	IC201 (2)(3)(4)(5)	L7809	270922	-
	IC202 (1)(6)	L7805CV	257704	-
	IC202 (2)(3)(4)(5)	L7805CV	270856	-
	IC301	STV8172	270381	-
	IC602	TDA7266SA	268347	-
	IC801	STRW6735	268348	-
#	**IC802**	PS2561L1-1V	268349	-
	IC901	4052	268350	-
	IC1001	MSPP3425G	268343	-
	IC1201	TC90A49P	268345	-
	J310	1N4148	266885	-
	L501	1N4148	266885	-
	Q007	2SC1815Y	266579	-
	Q008	2SA1015Y	266899	-
	Q01	-	268364	-
	Q033C	2SC1815Y	266579	-
	Q101	2SC3779D	266902	-
	Q202, 03, 04	2SC1815Y	266579	-
	Q205	2SA1015Y	266899	-
	Q208	2SA817AY	266603	-
	Q209	PDTC124ES	266897	-
#	**Q401**	2SC2482	266900	-
	Q402	2SC1815Y	266579	-
#	**Q411**	3DD3402	268428	-
	Q412, 13	2SA1015Y	266899	-
	Q414	IRF630MFP	268367	-
	Q501	2SC4544	208434	-
	Q502	2SC1815Y	266579	-
	Q503	2SC4544	208434	-
	Q504	2SC1815Y	266579	-
	Q505	2SC4544	208434	-
	Q506	2SC1815Y	266579	-
	Q507	2SA562TM-O	268369	-
	Q601	2SC1815Y	266579	-
	Q602	2SA1015Y	266899	-
	Q603	PDTC124ES	266897	-
	Q820	-	268370	-
	Q821	2SC4544	208434	-

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PARTS LIST continued

Item No.	Type No.	Mfr. Part No.	Notes
Q822 Thru			
Q825	2SC1815Y	266579	-
Q901 Thru			
Q904	2SC1815Y	266579	-
Q911	2SC1815Y	266579	-
Q912	2SA1015Y	266899	-
Q913, 14, 17	2SC1815Y	266579	-
Q918, 19	PDTC124ES	266897	-
Q1003	2SC1815Y	266579	-
Q1201	2SC1815Y	266579	-
Q1202	2SA1015Y	266899	-
Q1203	2SC1815Y	266579	-
Q1211	2SA1015Y	266899	-
Q1212	2SC1815Y	266579	-
Q1213, 14	2SK362-Y	268365	-
Q1215, 18	2SA1015Y	266899	-
R212	1N4148	266885	-

Item No.	Function/Rating	Mfr. Part No.	Notes
# **C411**	.0039 5% 1.6kV	268312	-
	.0036 5% 1.6kV	268311	-
	.0033 5% 1.6kV	268449	-
# **C412**	.0082 5% 1.6kV	268436	-
	.0068 5% 1.6kV	268424	-
# **C413**	.027 5% 400V	270395	-
	.022 5% 400V	268313	-
# **C414**	.0076 5% 1.6kV	268314	-
	.0082 5% 1.6kV	268436	-
	.0056 5% 1.6kV	270396	-
	.0072 5% 1.6Kv	268450	-
C415	4.7µF 20% 50V NP	268315	-
# **C419**	.47 5% 400V	268425	-
	.51 5% 400V	270402	-
	.56 5% 400V	270927	-
	.33 5% 400V	268397	-
C505	.001 10% 2kV	268322	-
# **C801, 02**	.22 20% 250VAC	270379	-
	.22 20% 275VAC	266326	-
C804	.0047 +80% -20% 250VAC	266984	-
# **C804A**	470pF 10% 400VAC	266983	-
C805	.0047 +80% -20% 250VAC	266984	-
# **C805A**	470pF 10% 400VAC	266983	-
C815	.0015 10% 2kV	268330	-

Item No.	Function/Rating	Mfr. Part No.	Notes
C826	470pF 10% 2kV	268439	-
# **C840**	.0022 20% 400VAC	266982	-
C1001, 02	3.3pF ±.25pF 50V NPO	266971	-
D811A, B	Ferrite Bead	267016	-
D820A, B	Ferrite Bead	268283	-
D822A, B	Ferrite Bead	268283	-
D823A, B	Ferrite Bead	268283	-
# **DEGAUSS** (1)	Degaussing	268431	-
# **DEGAUSS** (2)(3)(4)(5)	Degaussing	263503	-
# **DEGAUSS** (6)	Degaussing	268466	-
# **F801**	Fuse	268342	5Amp
F801A, B	Fuse Holder	267064	For F801
IR001A	Receiver	270382	Remote
J603, 04	2.2µH	270398	-
J1005	22µH	267008	-
L001	Ferrite Bead	270407	-
L002	10µH	267010	-
L101	47µH	268351	-
L102	1µH	267007	-
L204, 05 06, 08	22µH	267013	-
L209, 12	10µH	267010	-
L301	Ferrite Bead	268352	-
L413	600µH	268353	-
# **L414** (1)(2)(4)(6)	24µH	270399	-
# **L414** (3)(5)	18µH	268427	-
L501	1N4148	266885	-
L502	10µH	267011	-
L503 (1)(2)(3)(4)(5)	5.6µH	268355	-
L503 (6)	10µH	267011	-
L505, 06	Ferrite Bead	267016	-
L801	100µH	267012	-
L1001	22µH	267008	-
L1201	10µH	267010	-
L1211 Thru			
L1215	10µH	267010	-
L1216	.6µH	267009	-
L1217	10µH	267010	-
# **P800** (1)(6)	Line Cord	268396	Polarized
# **P800** (2)(3)(4)(5)	Line Cord	268457	Polarized
P901	Jack	267046	Assembly
P902	Jack	268360	Video Input
P903	Jack	268360	Assembly
P904	Jack	268361	Assembly

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PARTS LIST continued

	Item No.	Function/Rating	Mfr. Part No.	Notes
	P905	Jack	268360	Assembly
	R302	3900 1% 1/4W	268381	-
	R303	36K 1% 1/4W	268429	-
		33K 1% 1/4W	268382	-
	R311	10K 1% 1/4W	268385	-
	R312	18K 1% 1/4W	268386	-
	R404	4700 5% 7W	268390	-
#	**R516, 17, 18**	15K 2W	-	-
		4700 5% 1/6W	266282	-
#	**R801**	1M 20% 1/2W	266940	-
	R820	Fuse	268410	5Amp, 250VAC
	R821, 23	Fuse	268411	3Amp, 250VAC
	R827	4700 5% 5W	268413	-
	R834A	6800 1% 1/4W	176634	-
	R834B	390 1% 1/4W	266595	-
	R835	120K 1% 1/2W	268414	-
#	**R840**	8.2M 1W	266941	-
#	**RL01**	Relay	268417	Degaussing
#	**RT801** (1)(6)	PTC	268418	-
#	**RT801** (2)(3)(4)(5)	PTC	270926	-
#	**RT802**	NTC	266357	-
	S002A	Switch	267136	Menu
	S003A	Switch	267136	Volume -
	S004A	Switch	267136	Volume +
	S005A	Switch	267136	Channel -
	S006A	Switch	267136	Channel +
	S008	Switch	267136	Power
#	**S501**	Socket	266290	CRT
#	**T401**	Horizontal Drive	266291	-
#	**T402** (7)	Horizontal Output	268419	-
#	**T801, 02**	Line Filter	268420	-
#	**T803**	Power	268421	-
	TU101	Tuner	270388	TEDH9-251A
#	**V801**	CRT	-	-
	VR802	330 B+	270389	-
		2000 B+	-	-
	W601, 02 (1)	Speaker	270373	16 Ohms, 8W
	W601, 02 (6)	Speaker	268472	16 Ohms, 5W
	W601, 02 (2)(3)(4)(5)	Speaker	271001	60mm X 125mm, 16 Ohms
	X001	Crystal	266315	8MHz
	X201	Trap	266318	4.5MHz
	X202	Filter	266317	4.5MHz
	X1001	Crystal	268423	18.432MHz

Item No.	Function/Rating	Mfr. Part No.	Notes
Z101	Filter	266319	SAW
	PC Board (4)	270963	Comb Filter
	PC Board (2)(5)	270959	CRT
	PC Board (3)(4)	270964	CRT
	PC Board (2)(3)(4)(5)	270958	IR Receiver
	PC Board (2)(3)(4)(5)	270961	Keyboard
	PC Board (2)(3)(4)(5)	270962	Side
	PC Board (3)(5)	260967	Yoke Adapter
	Spacers	267049	Yoke Positioning (3 Used)
	Transmitter (2)(3)(4)(5)	265714	Remote, RCR130TB1
	Transmitter (1)(6)	270372	Remote

 # For SAFETY use only equivalent replacement part.

(1) Used in model 27V412T.

(2) Used in model 27V412TYX1.

(3) Used in model 27V412TYX3.

(4) Used in model 27V412TYX5.

(5) Used in model 27V412TYX8.

(6) Used in model 24V412T.

(7) Screen and focus controls are part of T402.

Important Parts Information

- **Parts not listed in the parts list are commonly available at your local electronics parts retailer.**
- The parts listed here are those not usually available from a well-stocked supply cabinet or bin.
- On the parts lists, safety items are marked with a **#** to remind you that only exact replacements are recommended for these items.
- When ordering parts, state the model number, part number, and description.

Obtaining Parts

Many of these parts are available from your local Sams authorized distributor or the manufacturer of the equipment. Call Sams for the name of your nearest distributor:

800-428-7267

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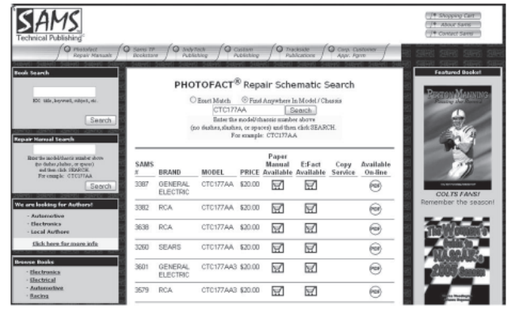

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